

Impact of Continuing Care Services on Substance Use Outcomes in a Two-Year Follow-up Study

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The Continuum of Care Approach to Addiction Treatment

- It is now widely believed that substance abusers benefit from a continuum of care approach to treatment, in which:
 - Treatment intensity is reduced as progress is made (example: inpatient followed by outpatient)
 - Treatment intensity can be increased when patients do not respond to treatment or when substance use outcomes worsen (example: outpatient stepped up to inpatient)

Potential Advantages to the Continuum of Care Model

- Reduces costs by:
 - Shortening stays in index residential treatment
 - Reducing the need for subsequent episodes of residential treatment.
- Reducing burdens on patients and families
 - Childcare
 - Employment
- Improves substance use outcomes by spreading treatment out over longer periods

The Continuum of Care Approach to Addiction Treatment

- However, there is very little data on the impact of the continuum of care approach in the addictions
- Most of the work that has been done has focused on the “aftercare” phase of treatment
 - Correlational studies usually find attendance in aftercare is associated with good outcomes
 - However, randomized studies have not been as positive.

Goals of the Present Study

- Compare alcohol use outcomes of clients who receive various elements of the continuum of care, after controlling for other important factors that predict outcome.
- Examine the effects of attendance at self-help meetings, and the combination of frequent self-help attendance and formal continuing care.

Design of the Study

Naturalistic follow-up of substance abusers intaked to drug free treatment programs (non-methadone) in Cuyahoga County, OH.

- Clients: Male (60%) and female (40%)
- Assessments: baseline, and 6, 12, and 24 months
- Sources of data:
 - CSAT Computer Assisted Central In-Take (CIAI-C)
 - Administrative data on services received
- Follow-up rate: approximately 70-75% at each point.

Treatment Pathways

- Single modality
 - Detoxification only
 - Inpatient (IP) only
 - Intensive outpatient (IOP) only
 - Standard outpatient (OP) only
- “Step down” sequence
 - IP followed by IOP or OP
 - IP followed by IOP followed by OP
 - IOP followed by OP
- “Step up” sequence
 - IOP or OP followed by IP or detox

Treatment Pathways

- Clients experienced only one level of care (N=259)
- Clients experienced some sort of formal “stepdown” care (N=80)
- Clients experienced some sort of “step up” care (N=36)
- Primary analyses involve comparisons of the first two groups, although impact of “step up” care was also examined

Potential Control Variables

- Gender
- Years of use*
- Baseline value of the outcome variable*
- Housing situation*
- Previous treatment
- Self-help participation*
- Self-efficacy index*
- Perceived control over substance use
- Degree of dissatisfaction with self when using
- Fear the worst if use continues
- If withdrawal is too severe, will drop out
- Degree to which conditions that led to substance use are still present

Outcome Variable

Average frequency of alcohol use in the past 6 months

1= never/none

2= one time

3= less than once per week

4= about once per week

5= 2 to 6 times per week

6= about once per day

7= 2 to 3 times almost every day

8= 4 or more times a day almost every day

Results: Single Modality vs. Stepdown

	<u>Alcohol Use Outcomes</u>		
	<u>6 Months</u>	<u>12 Months</u>	<u>24 Months</u>
Single Modality	2.66	2.68	2.68
Stepdown Care	2.18	2.01	2.30
F and P values	3.14 +	6.29 *	1.80 ns

Note: least square means presented, after controlling for baseline value of the outcome measure

Results: Stepdown Care and Self-Help (6mo)

	<u>Alcohol Outcomes</u>		
	6 mo	12mo	24mo
(1) No Stepdown / Low Self-help	3.23	2.87	3.33
(2) Stepdown / Low Self-help	2.71	2.36	3.03
(3) No Stepdown / High Self-help	1.67	2.02	2.00
(4) Stepdown / High Self-help	1.28	1.67	1.63
Controlling for years drinking, and drinking housing, and self-efficacy at baseline	1>3,4 2>3,4	1>3,4	1>3,4 2>4
Main effect for self-help at 6 mo (F, P)	22.77 ***	4.97 *	15.22 ***

Step Up vs. Single Modality vs. Step Down

	<u>Alcohol Use Outcomes</u>		
	6 Mo	12 Mo	24 Mo
Step up Care	2.73	2.38	2.28
Single Modality	2.68	2.69 ¹	2.68
Step down Care	2.20	2.02 ¹	2.31
F and P values	1.64 ns	3.28 *	1.25 ns

Note: least square means presented, after controlling for baseline value of the outcome measure. Means with same superscript are different ($p < .05$)

Effect of Self-Help in Clients Receiving Step Up Care

	<u>Alcohol Use Outcomes</u>		
	6 Mo	12 Mo	24 Mo
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<u>Step up Care</u>			
Low Self-help	2.76	2.35	2.69
High Self-Help	2.01	2.42	2.49

Note: least square means presented, after controlling for baseline alcohol use, years drinking, housing, self-efficacy

Further Refinements to the Analyses

- Data on actual services received: type and duration
- Impact of subsequent episodes of care
- Inclusion of other potential control variables, including time varying covariates (e.g., self-help and housing at each follow-up)
- Examination of other substance use outcomes (e.g., cocaine)
- Larger sample

Conclusions

- Preliminary evidence from the study suggests that stepdown care is associated with somewhat better drinking outcomes over the first year following intake, when pretreatment drinking is controlled.
- However, the effect is no longer significant when other control variables are included– years of drinking, housing, and self-efficacy at baseline, and self-help attendance at 6 months.
- Additive effect of self-help (6 months) and stepdown care:
 - Worst outcomes in No SD/low self-help group
 - Best outcomes in SD/high self-help group
- Also, a strong main effect for self-help at 6 months

Conclusions, continued

- Finally there was some evidence that those who received “step up” care, presumably because they did poorly in the initial level of care, did relatively well over the 2-year follow-up.